

US009636051B2

(12) United States Patent

Emery et al.

(54) **DETECTION METER AND MODE OF OPERATION**

(75) Inventors: **Jeffrey L. Emery**, Redwood City, CA (US); **Michael F. Tomasco**, Los Altos, CA (US); **Charles Hu**, Sunnyvale, CA

(US)

(73) Assignee: Intuity Medical, Inc., Sunnyvale, CA

(US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 728 days.

(21) Appl. No.: 12/457,331

(22) Filed: Jun. 8, 2009

(65) Prior Publication Data

US 2010/0021947 A1 Jan. 28, 2010

Related U.S. Application Data

- (60) Provisional application No. 61/129,149, filed on Jun. 6, 2008.
- (51) **Int. Cl. G01N 33/00** (2006.01) **A61B 5/145** (2006.01)
 (Continued)
- (52) U.S. Cl.

(Continued)

(10) Patent No.: US 9,636,051 B2

(45) **Date of Patent:**

May 2, 2017

58) Field of Classification Search

(56) References Cited

U.S. PATENT DOCUMENTS

842,690 A 1/1907 Oswalt D137,874 S 5/1944 Partridge (Continued)

FOREIGN PATENT DOCUMENTS

CA 2 513 465 A1 8/2004 DE 199 22 413 A1 11/2000 (Continued)

OTHER PUBLICATIONS

Notification of Transmittal of the International Search Report and the Written Opinion of the International Searching Authority Forms (PCT/ISA/220, PCT/ISA/210 and PCT/ISA/237) issued in corresponding International Application No. PCT/US 09/03441 dated Jul. 28, 2009.

(Continued)

Primary Examiner - Sam P Siefke

(57) ABSTRACT

A method for performing an assay to determine the presence or concentration of an analyte contained in a sample of body fluid by using a device comprising at least one analyte quantification member and a sensor associated therewith, the method includes: applying a first sample to the analyte quantification member; and detecting the presence or absence of an adequate sample volume; wherein upon detection of the absence of an adequate sample volume, initiating a finite timed period, and signaling the user to introduce a second sample of body fluid to the analyte quantification member. Associated arrangements and devices are also disclosed.

25 Claims, 6 Drawing Sheets

